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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,701	03/22/2005	Susumu Matsusaka	267493US2PCT	8935
22850	7590	08/10/2006	EXAMINER	
C. IRVIN MCCLELLAND OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			BRASE, SANDRA L	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/528,701

Applicant(s)

MATSUSAKA, SUSUMU

Examiner

Sandra L. Brase

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 22-30 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/22/05</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it is not on a separate sheet.

Correction is required. See MPEP § 608.01(b).

On page 25, line 13, “poer” should be “power”.

On page 30, lines 16 and 19, “706” should be changed to “709”.

On page 32, line 17, “portioning” should be changed to “partitioning”.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 9, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Hirose et al. (US 6,847,795).
4. Fujita et al. (...523) disclose an image forming apparatus comprising: a fixing unit (29) that fixes a toner image transferred to paper, and fixing unit further having a plurality of heaters (2a and 2b); a main power supply (3) that provides a portion of the heaters with voltage; and a secondary power supply (4) that provides another portion of the heaters connected to the portion of the heaters in parallel with power charged by the main power supply ([0086]-[0090]). The secondary power supply comprising a capacitor of high capacity ([0072]) and a discharging unit

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that discharges a charge stored in the capacitor ([0068], [0073], [0074], [0076], [0077], and figures 1-6), where it is obvious that the discharging unit could be controlled so as to discharge a charge stored when the secondary power supply is being maintained or replaced. However, Fujita et al. (...523) do not disclose the claimed location of the secondary power supply, the switch unit and the ventilation and cooling unit. Hirose et al. (...795) disclose an image forming apparatus including a power supply that is disposed below and in the neighborhood of a fixing unit (col. 5, lines 17-45; and figure 1). A switch unit that switches on and off a ventilation unit (120) for generating air flow in and around the power supply, where the ventilation unit is a cooling unit that cools an interior of the power supply (col. 11, lines 14-67). It would have been obvious to one of ordinary skill in the art at the time of the invention for the power supply to be placed at the claimed location, as disclosed by Hirose et al. (...795) since such a location for the placement of the power supply is well known in the art. Moreover, it would have also been obvious to one of ordinary skill in the art at the time of the invention to have the claimed switch, and ventilation and cooling unit, as disclosed by Hirose et al. (...795), so as to control a temperature in the vicinity of the power supply.

5. Claims 2, 13-15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Nakafuji et al. (US 2003/0099479).

Fujita et al. (...523) disclose an image forming apparatus comprising: a fixing unit (29) that fixes a toner image transferred to paper, and fixing unit further having a plurality of heaters (2a and 2b); a main power supply (3) that provides a portion of the heaters with voltage; and a secondary power supply (4) that provides another portion of the heaters connected to the portion

of the heaters in parallel with power charged by the main power supply ([0086]-[0090]). The secondary power supply comprising a capacitor of high capacity ([0072]) and a discharging unit that discharges a charge stored in the capacitor ([0068], [0073], [0074], [0076], [0077], and figures 1-6), where it is obvious that the discharging unit could be controlled so as to discharge a charge stored when the secondary power supply is being maintained or replaced. However, Fujita et al. (...523) do not disclose the claimed placement of the power supply, and the claimed insulation. Nakafuji et al. (...479) disclose an image forming apparatus including placing a power supply between a side face of a chassis of the image forming apparatus and the fixing unit ([0026] and figure 1). An insulation member is disposed between the fixing unit and the power supply, where an insulation member insulation member is disposed so as to cover the secondary power supply ([0040]-[0041]). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the power supply located in the claimed location, as disclosed by Nakafuji et al. (...479), since such a placement of a power supply in an image forming apparatus is well known in the art. Furthermore, it would have also been obvious to one of ordinary skill in the art at the time of the invention to have the claimed insulation, as disclosed by Nakafuji et al. (...479) so as to protect the user and to keep away heat output from the fixing device.

6. Claims 4, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Hirose et al. (US 6,847,795) as applied to claim 1 above, and further in view of Nakafuji et al. (US 2003/0099479).

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7. Fujita et al. (...523) in view of Hirose et al. (...795) disclose the features mentioned previously, but do not disclose the claimed insulation. Nakafuji et al. (...479) disclose an insulation member is disposed between the fixing unit and the power supply, where an insulation member insulation member is disposed so as to cover the secondary power supply ([0040]-[0041]). It would have also been obvious to one of ordinary skill in the art at the time of the invention to have the claimed insulation, as disclosed by Nakafuji et al. (...479) so as to protect the user and to keep away heat output from the fixing device.

8. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Hirose et al. (US 6,847,795) as applied to claim 1 above, and further in view of Setoriyama (US 5,561,499).

9. Fujita et al. (...523) in view of Hirose et al. (...795) disclose the features mentioned previously, but do not disclose the claimed first and second connection terminals. Setoriyama (...499) discloses an image forming apparatus including a first connection terminal (22) provided on the chassis of the image forming apparatus and a second connection terminal (22a) that is electrically connected to the second power supply, the second connection terminal being connectable to the first connection terminal, where the first connection terminal and the second connection terminal are detachable (col. 3, lines 18-26; col. 4, lines 15-22; and figure 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed first and second connection terminals, as disclosed by Setoriyama (...499), so as to provide electrical connection.

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10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Hirose et al. (US 6,847,795) as applied to claim 1 above, and further in view of Midgley et al. (US 4,574,188).

11. Fujita et al. (...523) in view of Hirose et al. (...795) disclose the features mentioned previously, but do not disclose the size of the wire used. Midgley et al. (...188) disclose connecting a power supply with a wire of size 18 AWG (col. 9, lines 39-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed size of wire to connect the power supply, as disclosed by Midgley et al. (...188), since the use of such size wire is well known in the art.

12. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Hirose et al. (US 6,847,795) as applied to claim 2 above, and further in view of Setoriyama (US 5,561,499).

13. Fujita et al. (...523) in view of Hirose et al. (...795) disclose the features mentioned previously, but do not disclose the claimed first and second connection terminals. Setoriyama (...499) discloses an image forming apparatus including a first connection terminal (22) provided on the chassis of the image forming apparatus and a second connection terminal (22a) that is electrically connected to the second power supply, the second connection terminal being connectable to the first connection terminal, where the first connection terminal and the second connection terminal are detachable (col. 3, lines 18-26; col. 4, lines 15-22; and figure 4). It would have been obvious to one of ordinary skill in the art at the time of the invention to have

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the claimed first and second connection terminals, as disclosed by Setoriyama (...499), so as to provide electrical connection.

14. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Nakafuji et al. (US 2003/0099479) as applied to claim 1 above, and further in view of Hirose et al. (US 6,847,795).

15. Fujita et al. (...523) in view of Nakafuji et al. (...479) disclose the features mentioned previously, but do not disclose the claimed switch unit and the ventilation and cooling unit. Hirose et al. (...795) disclose an image forming apparatus including a switch unit that switches on and off a ventilation unit (120) for generating air flow in and around the power supply, where the ventilation unit is a cooling unit that cools an interior of the power supply (col. 11, lines 14-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed switch, and ventilation and cooling unit, as disclosed by Hirose et al. (...795), so as to control a temperature in the vicinity of the power supply.

16. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (US 2002/0043523) in view of Nakafuji et al. (US 2003/0099479) as applied to claim 2 above, and further in view of Midgley et al. (US 4,574,188).

17. Fujita et al. (...523) in view of Nakafuji et al. (...479) disclose the features mentioned previously, but do not disclose the size of the wire used. Midgley et al. (...188) disclose connecting a power supply with a wire of size 18 AWG (col. 9, lines 39-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed size of

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wire to connect the power supply, as disclosed by Midgley et al. (...188), since the use of such size wire is well known in the art.

Allowable Subject Matter

18. Claims 3 and 22-330 are allowed.

Prior Art

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Azuma et al. (US 5,907,745) and Setoriyama et al. (US 6,415,118) disclose an image forming apparatus including ventilation.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is (571) 272-2131.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray, can be reached on (571) 272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Sandra L. Brase". The signature is written in a cursive style with a large, stylized "S" and "B".

Sandra L. Brase
Primary Examiner
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August 3, 2006